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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,792	08/04/2003	Yuki Amano	241168US0	5557

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EXAMINER	
PENG, KUO LIANG	
ART UNIT	**PAPER NUMBER**
1712	

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/632,792	AMANO ET AL.	
	Examiner	Art Unit	
	Kuo-Liang Peng	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/28/06 Amendment*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 4, 6, 8-12* is/are pending in the application.

4a) Of the above claim(s) *11-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4, 6, 8-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The Applicants' amendment filed on April 28, 2006 is acknowledged. Claims 2-3, 5 and 7 are deleted. Claims 1, 4, 6 and 10 are amended. Claims 11-12 are withdrawn. Now, Claims 1, 4, 6 and 8-10 are pending for consideration.

2. Claim rejection(s) (except the term "volatile organic components") under 35 USC 112 in the previous Office Action (Paper No. 012905) is/are removed.

3. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

Claim Rejections - 35 USC § 112

4. Rejection of Claims 1, 4, 6 and 8-10 under 35 USC 112 is maintained because the rejection is adequately set forth in paragraph 4 of Paper No. 012905. Applicant's arguments have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 11, 1st paragraph), Applicants' specification refers to "volatile organic components" can be hexanes, methanol,

ether or the like. However, this is not a definition. Furthermore, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. In re Van Guens, 988 F. 2d 1811, 26 USPQ 2d 1057 (Fed. Cir. 1993) In view of the definition of "volatile organic compounds" described in Hawley's Condensed Chemical Dictionary, the aforementioned methanol and ether appears not to be considered as volatile organic components.

Claim Rejections - 35 USC § 102

5. Rejection of Claims 1 and 8-10 under 35 USC 102(b) as being anticipated by Kobayashi (US 4 849 022) is maintained because the rejection is adequately set forth in paragraph 6 of Paper No. 102905. Applicant's arguments have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 8, 1st and 2nd paragraphs), as mentioned in the previous Office action (Paper No. 102905), Examiner has a reasonable basis to believe that Kobayashi does teach the surface modified silica contains residual volatiles in an amount falling within the range set forth in the present invention. Applicants primarily argue that Kobayashi's method will not

result in a metal oxide containing the claimed amount of residual volatiles. However, this is merely a speculation, not evidence. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) In addition, although Kobayashi is silent on the specific method for treating the metal oxide, the instant claims are **product-by-process** claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

6. Rejection of Claims 1 and 8-10 under 35 USC 102(b) as being anticipated by Shibasaki (US 5 483 525) and rejection of Claims 4 and 6 under 35 USC 103(a) as unpatentable over Shibasaki in view of Kabayashi are maintained because the rejection is adequately set forth in paragraphs 7 and 12 of Paper No. 102905. Applicant's arguments have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 8, 1st and 2nd paragraphs), as mentioned in the previous Office action (Paper No. 102905), Examiner has a reasonable basis to believe that Shibasaki does teach the surface modified silica contains residual volatiles in an amount falling within the range set forth in the present invention. Applicants primarily argue that Shibasaki's method will not result in a metal oxide containing the claimed amount of residual volatiles. However, this is merely a speculation, not evidence. Especially, the temperature of 70oC mentioned in Applicants' argument is the temperature at which the metal oxide is surface modified. However, note that Shibasaki teaches that the solvent is removed at a temperature higher than 70oC. (col. 3, line 25 to col. 4, line 4) The solvent removal temperature is exemplified as 300oC. (Examples) Applicants primarily argue that Kobayashi's method will not result in a metal oxide containing the claimed amount of residual volatiles. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) In addition, although Shibasaki is silent on the specific method for treating the metal oxide, the instant claims are **product-by-process** claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does

not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

7. Rejection of Claims 1 and 8-10 under 35 USC 102(b) as being anticipated by JP726 (JP 05-139726) is maintained because the rejection is adequately set forth in paragraph 8 of Paper No. 102905. Applicant's arguments have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 9, 2nd paragraph), as mentioned in the previous Office action (Paper No. 102905), Examiner has a reasonable basis to believe that JP726 does teach the surface modified alumina contains residual volatiles in an amount falling within the range set forth in the present invention. Especially, JP726 teaches the solvent removal at a temperature up to 300oC. ([0018]) Applicants primarily argue that JP726 does not teach Applicants' process. However, the instant claims are **product-by-process** claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does

not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

8. Rejection of Claims 1 and 8-10 under 35 USC 102(b) as being anticipated by JP976 (JP 63-043976) and rejection of Claims 4 and 6 under 35 USC 103(a) as being unpatentable over JP976 in view of Kabayashi are maintained because the rejection is adequately set forth in paragraph 9 of Paper No. 102905. Applicant's arguments have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 9, 3rd paragraph), as mentioned in the previous Office action (Paper No. 102905), JP976 does teach the surface modified silica and alumina contains residual volatiles in an amount falling within the range set forth in the present invention. Applicants argue that JP976's heat treatment is only at 110 to 200oC [120oC]. (page 4, upper left column) However, as mentioned in the previous Office action, the boiling points of the solvent and the condensation by-products (i.e., methanol and ethanol) are below the temperature of the final drying step. As such, Examiner has a reasonable basis to believe that the

surface modified silica contains residual volatiles in an amount falling within the range set forth in the present invention. Furthermore, the instant claims are **product-by-process** claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

9. Rejection of Claims 1, 4 and 8-9 under 35 USC 102(b) as being unpatentable over JP406 (JP 10-316406) is maintained because the rejection is adequately set forth in paragraph 10 of Paper No. 102905. Applicant's arguments have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 9, 4th paragraph to page 10, 2nd paragraph), as mentioned in the previous Office action (Paper No. 102905), JP406 teaches the surface modified fillers containing residual volatiles in an amount falling within the range set forth in the present invention. Applicants argue that

JP406's heat treatment is only at 50 to 250oC. However, as mentioned in the previous Office action, the treated filler is then heated up to 800oC and subsequently subjected to vacuum drying at 50oC 3mmHg for 8 hours. ([0006]-[0007] and [0013]-[0025]) Note that the boiling point of the solvent and the condensation by-product, methanol, is far below 800oC at normal pressure and 50oC at vacuum. Therefore, Examiner has a reasonable basis to believe that the surface modified filler contains residual volatiles in an amount falling within the range set forth in the present invention. Applicants further argue that JP406 does not teach the Applicants' method. However, the instant claims are **product-by-process** claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). JP406 further teaches the use of n-hexadecyltrimethoxysilane, etc. ([0011])

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on

(571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp
July 3, 2006

Kuo-Liang Peng
Primary Examiner
Art Unit 1712